



iOS App Development - Buff Bus App Project

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Our thought process

- Why iOS? It's the premier app development market.
- Students travel across campus by means of the Buff Bus
- The Buff Bus runs on a schedule, however actual timings may differ from printed schedule timings

Objective

- We aim to develop a mobile application which will provide a unified view of Buff Bus services.
- Doing so will provide many students with instant access to bus services and information in the palms of their hands.

Desired features

- Dynamic and interactive map
- Show schedule for nearest stop (location)
- Notifications for inbound busses
- Central notification system

Goals for semester

- Learning Objective-C
- Learning Xcode
- JSON

Implementation

```
- (void)updateGPS {
    NSString *str=@"http://joshferge.github.io/gps.json";
    NSURL *url=[NSURL URLWithString:str];
    NSData *data=[NSData dataWithContentsOfURL:url];
    NSError *error=nil;
    NSDictionary* response=[NSJSONSerialization JSONObjectWithData:data options:
                            NSJSONReadingMutableContainers error:&error];

    NSLog(@"Your JSON Object: %@ Or Error is: %@", response, error);|
    NSDictionary *coordinates = [response objectForKey:@"coordinates"];
    NSString *latitude = [coordinates objectForKey:@"latitude"];
    NSString *longitude = [coordinates objectForKey:@"longitude"];
    NSLog(@"lat %@ long %@", latitude, longitude);
    CLLocationCoordinate2D newloc = self.loc;
    self.loc = newloc;
    [self.mapView removeAnnotations:[self.mapView annotations]];
    MKPointAnnotation *bus = [[MKPointAnnotation alloc] init];
    bus.coordinate = self.loc;
    bus.title = @"Buff Bus #1";
    bus.subtitle = @"Folsom and Colorado";
    [self.mapView removeAnnotations:[self.mapView annotations]];
    [self.mapView addAnnotation:bus];
}
```


Implementation

```
#import <MapKit/MapKit.h>
#import <CoreLocation/CoreLocation.h>
#import <Foundation/Foundation.h>

@interface BuffBus : NSObject

@property (nonatomic, strong) NSString * LicensePlateNumber;

@property (nonatomic, assign) CLLocationCoordinate2D loc;

@property (nonatomic, assign) BOOL * isBusOn;

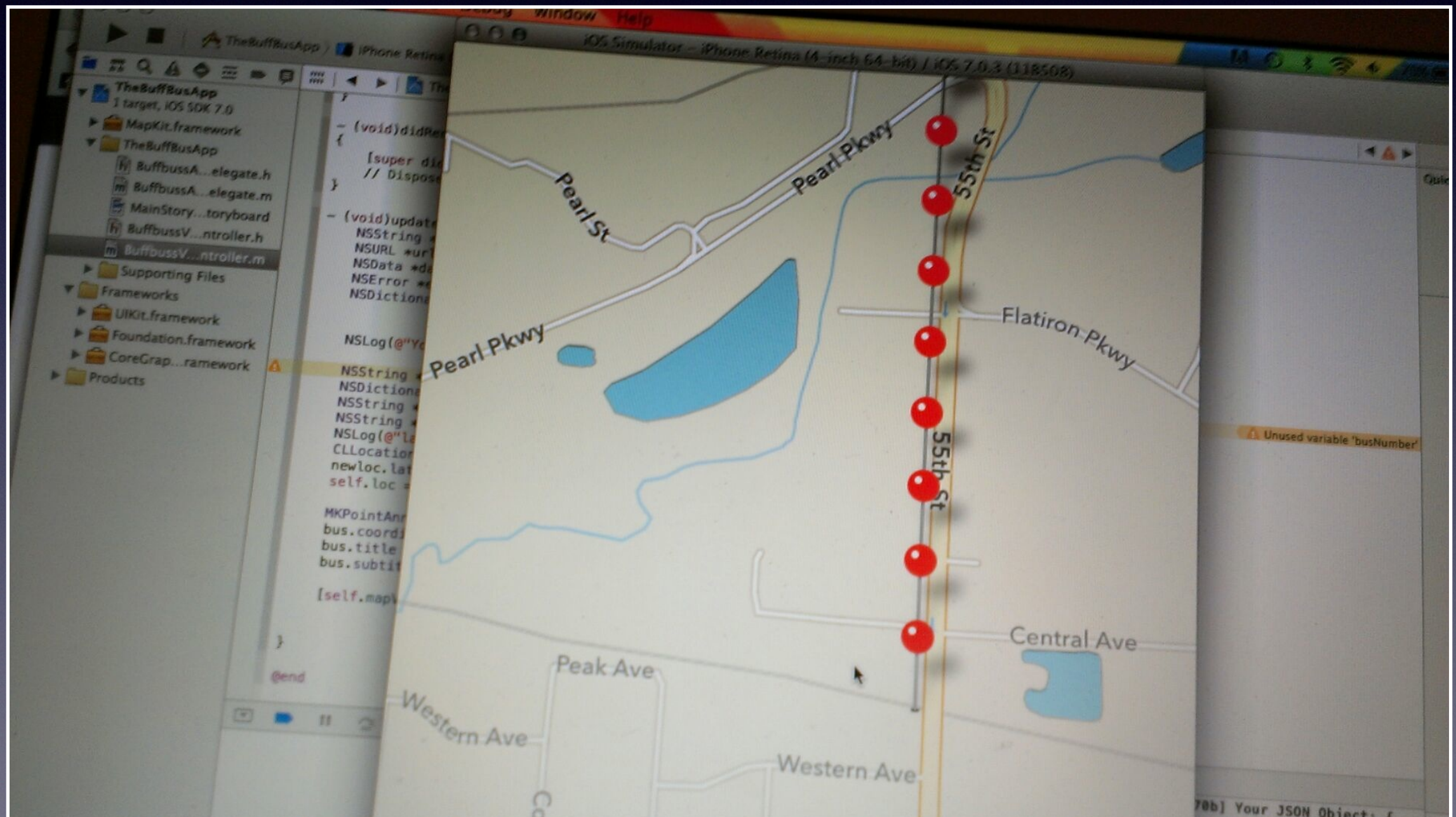
@property (nonatomic, assign) BOOL * isBusOnRoute;

@property (nonatomic, assign) NSInteger * passengerCount;

@property (nonatomic, assign) NSInteger * passengerLimit;
```

```
@end
```


What we've accomplished



Future Plans

- Still in contact
- Waiting for credentials to access real time gps data
- Plan on completing next semester

Josh Ferge

- Went to Career Fairs
- Startup Meetups
- CUNVC
- Updated LinkedIn
- Worked at ASSETT

Joshferge.me

Pradyumna Kikkeri (Prad)

- Human Centered Networking activities
- Talked to server side clients across the country in order to access realtime tracking data for this app
- Interviewed with Transit Manager to express interest in such a project
- Other HCC activities: Met with managers at Apple, Inc. to get an interview after the Holiday timeframe
- Aim to get an internship at Apple and show experience to transit from the retail side to the corporate side

<https://sites.google.com/site/pkikkeri14/>

Nick Smith

- Working at ASSETT
- Boulder music tech hackers meet up
- Job Fair
- Updated LinkedIn

NickSmith.me

Questions or
Comments?